



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,023	04/20/2001	Kannan Raj	ITL.0462US (P9816)	2391
21906 7590 11/26/2008 TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			EXAMINER SINGH, DALZID E	
			ART UNIT 2613	PAPER NUMBER
			MAIL DATE 11/26/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/839,023
Filing Date: April 20, 2001
Appellant(s): RAJ ET AL.

Mr. Timothy N. Trop
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 04 August 2008 appealing from the Office action mailed 03 April 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

In view of appellant's argument and the interpretation of the claim in view of the specification, the enablement rejection under 35 U.S.C. § 112, first paragraph for claims 1-4 and 7-10 is hereby withdrawn.

The prior art to Li (US Patent No. 6,385,371) had been inadvertently placed on the heading of the 35 U.S.C. § 103 rejection of the final office action. Such prior art should have been deleted and was not relevant to the claims limitation. The 35 U.S.C. § 103 rejection should be based on the following prior arts: Nakata (US Patent No. 5,500,857), Asahi (US Patent No. 6,195,186), Mo et al (US Patent No. 6,693,909), and Huber (US Patent No. 6,687,428).

(7) Claims Appendix

A substantially correct copy of appealed claims 1-4, 7-15 and 17-30 appears on pages 15-18 of the Appendix to the appellant's brief. The minor errors are as follows: claims 5, 6 and 16 have been cancelled; such cancellation is stated on the status of claims, page 5 of appellant's brief and on the claim listing filled 21 December 2007.

(8) Evidence Relied Upon

6,693,909	MO et al	02-2004
6,687,428	HUBER et al	02-2004
6,411,418	DERI et al	06-2002
5,500,857	NAKATA	03-1996
6,195,186	ASAHI	02-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4, 7-15, 17-30 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites, "... each transceiver to notify a first of the three transceivers when a second of the three transceivers is receiving a signal from a third of the three transceivers." There is no support for such limitation in the disclosure as originally filled as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 11 recites, "... notifying a first when a second system is receiving an optical communication from a third system." There is no support for such limitation in the disclosure as originally filled as to reasonably convey to one skilled in the relevant

Art Unit: 2613

art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 21 recites, "...notify a first processor when a second processor is receiving an optical communication from a third processor". There is no support for such limitation in the disclosure as originally filled as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

On page 8 lines 20-25, the specification discloses, "The optical receiver 26 tuning is done in sequence. When the code is matched with the receiving processor 12 at the wavelength of interest, the wavelength is locked for that receiver 26. The receiver 26 indicates a processor "busy" flag **for all other processors** 12 until it sets a processor "free" flag for all other processors 12. This suggest that all processor receives the flags and not as suggested by the claims.

Furthermore, on page 9, lines 20-26, the specification discloses, "When the wavelength signal is received, as determined in diamond 44, the processor busy flag or status bit is set as indicated in block 46. The status bit **may then be multicast** to all the other processors 12 in the system in accordance with one embodiment of the present invention,..." This suggest that all processor receives the flags and not as suggested by the claims.

Art Unit: 2613

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4 and 7-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term.

Process Control Corp. v. HydReclaim Corp., 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

The term "device" in claim 1 is used by the claim to mean "system", while the accepted meaning is "device." The term is indefinite because the specification does not clearly redefine the term. The specification discloses system and does not disclose the term "device".

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-4 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Deri et al (US Patent No. 6,411,418).

Regarding claims 1 and 11 (in view of the 112 rejection), Deri et al discloses optical communication system comprising:

an optical transceiver including a wavelength division multiplexer to enable optical communication with the other two transceivers (see col. 2, lines 37-64 and col. 5, lines 17-23).

Regarding claim 2, Deri et al teach the that the optical transmitter includes a laser (see Fig. 2).

Regarding claim 3, Deri et al teach the use of wavelength filter tunable to a particular input wavelength, which is located at the node (see col. 4, lines 1-5 and col. 6, lines 48-54).

Regarding claims 4 and 12, Deri et al teach that each processor is assigned a wavelength for communicating with the other processors located at other node (col. 5, lines 65-67 to col. 1-11).

Regarding claim 9, Deri et al teach that each optical transceiver within a node transmits a light beam together with a code identifying a sending and a receiving processor (see col. 5, lines 54-64 and col. 6, lines 18-47).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata (US Patent No. 5,500,857) in view of Asahi (US Patent No. 6,195,186) or Mo et al (US Patent No. 6,693,909).

Regarding claim 1 (in view of the 112 rejection), Nakata discloses optical communication system, as shown in Fig. 7, comprising:

an optical transceiver including a wavelength division multiplexer to enable optical communication with the other two transceivers (as shown in Fig. 7, Nakata shows multiple nodes (21-26), wherein each node comprises of optical transceiver, see col. 5, lines 32-35) to notify a first of the three processor when a second of the three

Art Unit: 2613

processor is receiving a signal from a third of the three processor (in col. 17, lines 27-52, Nakata teaches notifying a first processor (node) when a second processor (node) is receiving a beam from a third processor (a busy signal inserted into a frame pulse is transmitted as a token to go around the transmission line; since the frame pulse goes around the transmission lines, therefore other nodes or processor is notified through the management table that a particular wavelength is being used).

Nakata differs from these claims in that Nakata does not specifically disclose a processor coupled to each optical transceiver. However, it is extremely well known that optical transceiver comprises processor to process the signal. As disclosed by Nakata, since the nodes communicate by transmitting and receiving optical signal, therefore it would have been obvious that there exist processor to process the optical signal. Asahi and Mo et al is cited to show such well known concept. On Fig. 16, Asahi shows processor coupled to the data transceiver and on Fig. 3, Mo et al show processing system at the node. As evidenced by the prior arts, it is well known to provide processor at the nodes to process the signals. Therefore, it would have been obvious to an artisan of ordinary skill in the art to couple processor to the optical transceiver of Nakata. One of ordinary skill would have been motivated to do such in order to efficiently control operation of the optical transceiver in transmitting and receiving of information signal.

Furthermore, since the optical transceiver within a node is connected to other optical transceiver at other nodes (for example, in Fig. 7, Nakata shows that the nodes

Art Unit: 2613

are interconnected in a ring configuration), therefore processor of optical transceiver at one node location is coupled to other processor of optical transceiver located at other node locations.

Regarding claim 2, in col. 5, lines 30-32, Nakata teach the that the optical transmitter includes a laser.

Regarding claim 3, in col. 5, lines 22-25, Nakata teaches the use of wavelength filter tunable to a particular input wavelength, which is located at the node.

Regarding claim 4, in col. 5, lines 42-45, Nakata teaches that each processor (processor within the node, see claim 1) is assigned a wavelength (for example, λ_1) for communicating with the other processors located at other node.

Regarding claim 9, in col. 5, lines 55-60, Nakata teaches that each optical transceiver within a node transmits a light beam together with a code identifying a sending and a receiving processor (the code is in a form of an address within the packet of the signal to indicate self address and destination address).

Regarding claim 10, in col. 17, lines 27-52, Nakata teaches that when one processor is receiving a wavelength division multiplexed signal from another processor, the one processor broadcasts to all other processors that the one processor is busy (since a busy signal is indicated by inserting a 1 into a frame pulse, which is transmitted and circulated around the transmission line, therefore busy signal is being broadcast form one optical transceiver containing processor to other optical transceiver containing processor).

9. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata (US Patent No. 5,500,857) in view of Asahi (US Patent No. 6,195,186) or Mo et al (US Patent No. 6,693,909) and further in view of Huber (US Patent No. 6,687,428).

Regarding claim 7, as discussed above the combination discloses optical coupler and differs from the claimed invention in that the combination does not disclose that the coupler includes dispersive element to disperse the reflected light. Huber et al teach the use of dispersive element to disperse light after being reflected by the reflector (Fig. 4 shows dispersive element (38) to disperse light after being reflected by the reflector).

Regarding claim 8, as discussed in claim 7, furthermore, Huber et al show that the dispersive element includes a micro-mechanical structure (see col. 5, lines 46-48).

10. Claims 11-15 and 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakata (US Patent No. 5,500,857) in view of Asahi (US Patent No. 6,195,186) or Mo et al (US Patent No. 6,693,909).

Regarding claim 11 (in view of the 112 rejection), Nakata discloses optical communication system, as shown in Fig. 7, comprising:

an optical transceiver including a wavelength division multiplexer to enable optical communication with the other two transceivers (as shown in Fig. 7, Nakata

shows multiple nodes (21-26), wherein each node comprises of optical transceiver, see col. 5, lines 32-35); and

notifying a first processor when a second processor is receiving an optical communication from a third processor (in col. 17, lines 27-52, Nakata teaches notifying a first processor (node) when a second processor (node) is receiving a beam from a third processor (a busy signal inserted into a frame pulse is transmitted as a token to go around the transmission line; since the frame pulse goes around the transmission lines, therefore other nodes or processor is notified through the management table that a particular wavelength is being used).

Nakata differs from these claims in that Nakata does not specifically disclose a processor coupled to each optical transceiver. However, it is extremely well known that optical transceiver comprises processor to process the signal. As disclosed by Nakata, since the nodes communicate by transmitting and receiving optical signal, therefore it would have been obvious that there exist processor to process the optical signal. Asahi and Mo et al is cited to show such well known concept. On Fig. 16, Asahi shows processor coupled to the data transceiver and on Fig. 3, Mo et al show processing system at the node. As evidenced by the prior arts, it is well known to provide processor at the nodes to process the signals. Therefore, it would have been obvious to an artisan of ordinary skill in the art to couple processor to the optical transceiver of Nakata. One of ordinary skill would have been motivated to do such in

Art Unit: 2613

order to efficiently control operation of the optical transceiver in transmitting and receiving of information signal.

Furthermore, since the optical transceiver within a node is connected to other optical transceiver at other nodes (for example, in Fig. 7, Nakata shows that the nodes are interconnected in a ring configuration), therefore processor of optical transceiver at one node location is coupled to other processor of optical transceiver located at other node locations.

Regarding claim 12, in col. 5, lines 42-45, Nakata teaches that each processor (processor within the node, see claim 1) is assigned a wavelength (for example, λ_1) for communicating with the other processors located at other node.

Regarding claims 13 and 22, in col. 5, lines 51-67 to col. 6, lines 1-12, Nakata teaches step including scanning for the wavelengths of any of said other processors (the optical frame pulse is received detect or scan for available wavelength).

Regarding claims 14 and 23, in col. 5, lines 51-67, Nakata teaches that the node transmitting a light beam having a predetermined wavelength, and transmitting a code that identifies the transmitting processor and the intended receiving processor (the code is the packet signal including the self and destination address which is converted to a particular wavelength, for example λ_a , and transmitted on the transmission line).

Regarding claims 15 and 24, in col. 6, lines 5-12, Nakata teaches that the receiving processor identifies the wavelength of the incoming beam and the code accompanying said beam, and locks to the wavelength of the transmitting processor

Art Unit: 2613

(the node checks for available wavelength by identifying the wavelength of the incoming beam, which is included in the management table, if there is an available wavelength, then select or lock that wavelength for communication).

Regarding claims 17, 25 and 27, in col. 17, lines 27-52, Nakata teaches notifying a first processor (node) when a second processor (node) is receiving a beam from a third processor (a busy signal inserted into a frame pulse is transmitted as a token to go around the transmission line; since the frame pulse goes around the transmission lines, therefore other nodes or processor is notified through the management table that a particular wavelength is being used).

Regarding claims 18 and 26, in col. 18, lines 33-38, Nakata teaches indicating when said second processor is no longer communicating with said third processor (processor within the nodes informs other nodes when communication is finished or completed).

Regarding claim 19, in col. 5, lines 53-67, Nakata teaches using a code (for example, packet containing self and destination address) transmitted by the third processor (node) to determine if a given processor (node) is the intended recipient of a beam transmitted from the third processor (the recipient processor receive the address and determine whether the transmitted signal is intended for it).

Regarding claim 20, as discussed above, since the communication signal is transmitted in optical form (for example, wavelengths are transmitted from one node to the other nodes), therefore the processors (node) are optically interconnected.

Regarding claim 21 (in view of the 112 rejection), Nakata discloses optical communication system, as shown in Fig. 7, comprising:

identify a light communication from a node intended for said first node (in col. 5, lines 51-67 to col. 6, lines 1-28, Nakata teaches that wavelength between the nodes are assigned to be different wavelengths);

tune to said wavelength (each of the nodes are tuned to the assigned wavelength, see col. 5, lines 43-50); and

notifying a first processor when a second processor is receiving an optical communication from a third processor (in col. 17, lines 27-52, Nakata teaches notifying a first processor (node) when a second processor (node) is receiving a beam from a third processor (a busy signal inserted into a frame pulse is transmitted as a token to go around the transmission line; since the frame pulse goes around the transmission lines, therefore other nodes or processor is notified through the management table that a particular wavelength is being used).

Nakata differs from these claims in that Nakata does not specifically disclose a processor coupled to each optical transceiver. However, it is extremely well known that optical transceiver comprises processor to process the signal. As disclosed by Nakata, since the nodes communicate by transmitting and receiving optical signal, therefore it would have been obvious that there exist processor to process the optical signal. Asahi and Mo et al is cited to show such well known concept. On Fig. 16, Asahi shows processor coupled to the data transceiver and on Fig. 3, Mo et al show

Art Unit: 2613

processing system at the node. As evidenced by the prior arts, it is well known to provide processor at the nodes to process the signals. Therefore, it would have been obvious to an artisan of ordinary skill in the art to couple processor to the optical transceiver of Nakata. One of ordinary skill would have been motivated to do such in order to efficiently control operation of the optical transceiver in transmitting and receiving of information signal.

Furthermore, since the optical transceiver within a node is connected to other optical transceiver at other nodes (for example, in Fig. 7, Nakata shows that the nodes are interconnected in a ring configuration), therefore processor of optical transceiver at one node location is coupled to other processor of optical transceiver located at other node locations.

Regarding claim 28, in col. 5, lines 4-21 and 40-42, Nakata teaches the use optical communications and wavelength division multiplexing.

Regarding claim 29, in col. 5, lines 43-50, Nakata teaches that the first processor-based system (node) to communicate with other processor-based systems (node) using an assigned wavelength (for example, λ_1 is used for communication between node 22 to node 25).

Regarding claim 30, in col. 5, lines 51-57, Nakata teaches that the first processor-based system (node) to transmit a code (a code or packet containing self and destination address) that identifies said first processor-based system (node) and an intended receiving processor-based system (node).

(10) Response to Argument

On page 11, part A of the appeal brief, appellant argues that *"The Section 112 rejection (contained in paragraph 2 concerning claim 1) asserts that there is no support for "each transceiver to notify a first of three transceivers, when a second of the three transceivers is receiving a signal from a third of the three transceivers". Support is provided in the specification at page 4, lines 1-4 and page 5, lines 8-19; and page 8, lines 23-25."*

Claim 1 states, "... each transceiver to **notify a first** of the three transceivers **when a second** of the three transceivers is receiving a signal **from a third** of the three transceivers."; **claim 11 states**, "...notifying **a first** system when **a second** system is receiving an optical communication from **a third** system."; and **claim 21 states**, "...notify **a first** processor when **a second** processor is receiving an optical communication from **a third** processor."

However, the cited portion of the specification, as indicated by appellant does not disclose **"notifying or notify a first... when a second... receiving... from a third... "**.

For example, **page 4, lines 1-4**, the specification states, *"Each processor 12 can send a wavelength division multiplexed (WDM) signal to each of the other processors 12 using a wavelength division multiplexer 13 and can receive data using a*

Art Unit: 2613

demultiplexer 13. Each processor 12 transmits data at its own assigned wavelength.";

page 5, lines 8-19, the specification states, *"The optical interface 16 may include a reflective wavelength coupler 32 that directly couples to a plurality of optical fibers contained within the fiber cable 34. The reflective wavelength coupler 32 transmits optical signals to the fiber cable 34 and receives signals from the fiber cable 34. The incoming signals are transferred to the optical receiver 26 and outgoing signals are received from the optical transmitter 24. The optical transmitter 24 and receiver 26 together form an optical transceiver module 22. The optical transmitter 24 may be a Vertical Cavity Surface Emitting Laser (VCSEL) or an edge-emitting laser, as two examples."*; and **page 8, lines 23-25**, the specification states, *"The receiver 26 indicates a processor "busy" flag **for all other processors** 12 until it sets a processor "free" flag **for all other processors 12.**"*

As indicated above, since the specification, as originally filled, does not specifically disclose **"notifying or notify a first... when a second... receiving... from a third..."** as recites by the claims, therefore the 112 rejection is hereby sustained.

On page 12, part C of the argument, appellant argues that *"The rejection set forth in paragraph 5 of the final rejection concerns the difference between a device and a system. The assertion that there is some established difference in meaning between device and system is noted, but it is believed that there is no basis for such a difference. A system is still a device and a device may still be a system. Therefore,*

there is no reason that the language utilized is not appropriate. It is respectfully submitted that the suggestion that one skilled in the art would have trouble understanding what a device or system means should be reconsidered. There is no need to define terms of this ilk in the specification for anyone skilled in the art."

In the amendment filled 01 November 2004, appellant had amended the claim to replace "*multiprocessor **system***" to "*multiprocessor **device***" in order to overcome the art rejection and argued in the remark filled 01 November 2004, that "*Claim 1 has been amended to call for a multiprocessor device. In other words, the claims relate to a **single device** that includes three or more processors. For example, a server may have more than one processor and, particularly, may include three processors in some embodiments. The idea is to speed communications between processors in a multiprocessor system using wavelength division multiplexed communications. The cited reference does not relate to a multiprocessor device. It does not in any way relate to communication between processors as set forth in the body of claim 1. Instead, it relates to communications between nodes which are separate from one another and communicate over some type of optical network."*

However, page 3 of the specification, as originally filled, states "*Referring to Figure 1, a **multiprocessor system** 10 may include a plurality of processors 12. In the embodiment illustrated in Figure 1, four processors 12a, 12b, 12c, and 12d are optically interconnected, as indicated by the arrows, to one another.*", instead of "***multiprocessor device***" as amended in the claim. As defined in Newton's Telecom

Art Unit: 2613

Dictionary, system is "*an organized assembly of equipment, personnel, procedures and other facilities designed to perform a specific function or set of functions.*" Wherein, device is generally known as an equipment within the system. Figure 1 of applicant's invention shows plurality of transceivers or nodes (13a-13d) coupled to plurality of processors (12a-12d) respectively. Each one transceiver is coupled to one corresponding processor. The multiple processors are coupled as part of a system. There is no description in the specification nor figure shown of a **device** comprising **plurality of processors** (multiprocessor device). In light of this and appellant's argument that "*system is still a device and a device may still be a system*", the **system** as cited by the prior arts of record still meets the limitation of **device** cited in the claim at least in accordance with Appellant's interpretation.

On page 12, part D of the argument, appellant argues "*With respect to the rejection set forth in paragraph 9, based on the Deri reference, it is asserted that an optical transceiver including a wavelength division multiplexer enables optical communication with other two transceivers, at page 7 of the office action. Even if we were to assume arguendo that this is true, it fails to meet the limitations of the claims. It is not required that the applicant search the reference to attempt to see what the basis for the rejection is. Instead, it is required that each element of the claims be addressed. That has not occurred here and it is respectfully submitted that a prima facie rejection is not made out as a result.*"

The reference to Deri et al is cited on page 5 paragraph 7 of the final office action. Page 7 of the final official action, cited by appellant, recites reference to Nakata. For purpose of responding to such argument, it is assumed that appellant is arguing with respect to the Deri reference cited on page 5, paragraph 7 of the final office action. On col. 2, lines 46-52, Deri et al states, "*The use of **wavelength-division-multiplexed (WDM)** optical systems (FIG. 1), in which independent channels on different optical wavelengths are simultaneously broadcast to **a large number** (e.g.: hundreds) **of nodes** over a star coupler, is an attractive proposal **for multiprocessor interconnects**, offering the potential for wide-bandwidth, single-hop communications among all nodes.*" Therefore, Deri et al clearly disclose the use of wavelength division multiplexed optical system which inherently comprises wavelength division multiplexer to carry out wavelength division multiplexing function. Therefore based on this, the rejection is sustained.

On pages 12-13 part E of the argument, appellant argues that "*Claim 1 calls for notifying a first of three processors when a second of the three processors is receiving a signal from the third of the three processors. This last element is rejected based on the teaching in column 17, lines 27-52 of Nakata. However, that material does not involve any communication between nodes (which are alleged in the office action to be processors). Instead, it merely relates to the assignment of the wavelength for a subsequent transmission. The claim requires that a first processor be notified when a second of three processors is receiving a signal from a third of three processors. The*

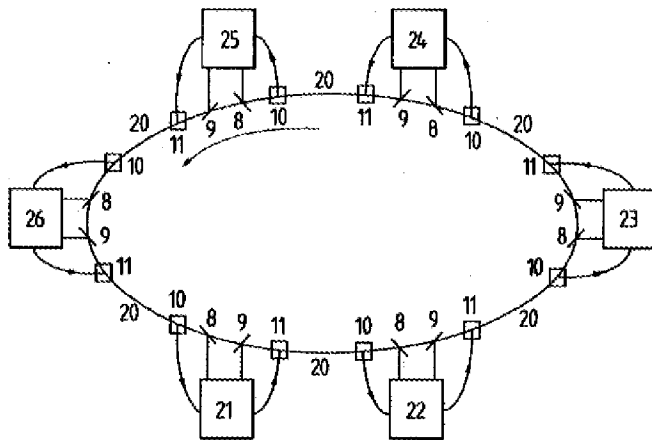
assignment of the wavelength involves no communication. There is no signal between second and third nodes. The first sentence of the cited language in column 17 makes it clear that what is being talked about here is the assignment of wavelengths before any communication. As indicated at lines 35 and 36, a node extracts a free wavelength and updates the wavelength management table. Clearly, this involves no communication between two nodes. When a wavelength is in use, the bit assigned is set to one for that wavelength. See column 17, lines 41 and 42. Thus, there is no situation where when a second and third nodes are communicating, a first node is notified. At most what would happen in the situation cited in the passage relied upon, is that one node obtains a wavelength and the bit associated with that wavelength is changed in status. That bit change is not communicated to any other node."

Appellant relies on page 8, line 20 to page 9, line 3 for the support of claim 1 (see Summary of Claimed Subject Matter on page 7 of the appeal brief) along with page 4, lines 1-4, page 5, lines 8-19 and page 8, lines 23-25 as discussed above. Appellant specifically points out that the support to claim 1 is found on page 8, line 20 to page 9, line 3 of the specification, which states, *"The optical receiver 26 tuning is done in sequence. When the code is matched with the receiving processor 12 at the wavelength of interest, the wavelength is locked for that receiver 26. The receiver 26 indicates a processor "busy" flag **for all other processors** 12 until it sets a processor "free" flag for all other processors 12. All other processors 12 may refrain from*

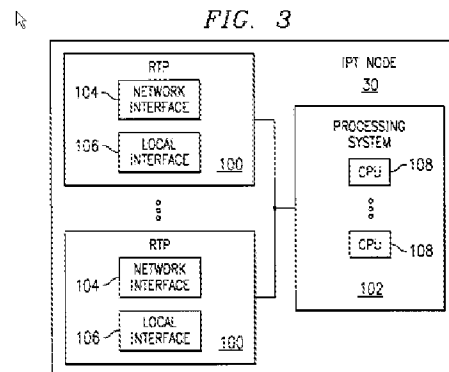
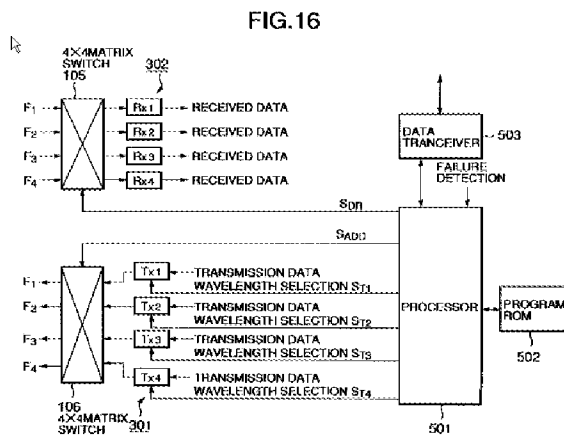
transmitting to the busy processor 12 until they detect the processor free flag, in accordance with one embodiment of the present invention."

The cited portion of the specification, which appellant relies for support of the claims does not disclose **"notifying or notify a first... when a second... receiving... from a third..."**. Therefore, in view of the 112 rejection, the part of the claim that states **"notifying or notify a first... when a second... receiving... from a third..."** have been interpreted in view of the cited portion of the specification which states *"The optical receiver 26 tuning is done in sequence. When the code is matched with the receiving processor 12 at the wavelength of interest, the wavelength is locked for that receiver 26. The receiver 26 indicates a processor "busy" flag for all other processors 12 until it sets a processor "free" flag for all other processors 12. All other processors 12 may refrain from transmitting to the busy processor 12 until they detect the processor free flag, in accordance with one embodiment of the present invention"*. This clearly suggests that **all** processors receive flags or signals. Contrary to the claims which state "notifying or notify a first... when a second... receiving... from a third..."

In interpreting the claims in view of the portion of the specification as cited by appellant, the prior arts of record still read on the claimed subject matter. For example, as shown in Fig. 7, Nakata shows optical transceivers (21-26) coupled together.



Nakata discloses that the transceiver transmits and receives signal and does not specifically disclose that the transceiver comprises processor. However, this limitation is supplemented by the secondary references to Asahi (Fig. 16) or Mo et al (Fig. 3) which teaches transceiver coupled to processor(s).



Therefore, the combination of Nakata and Asahi or Nakata and Mo et al reads on the claimed subject matter.

Furthermore, on col. 17, lines 32-52, Nakata discloses *"According to the present invention, a wavelength management table **indicating used wavelengths is circulated** through the DQDB line, and a node which extracts the wavelength management table selects a free wavelength, updates the wavelength management table, and sends the table to the transmission path 230. The wavelength management table is constituted by bits larger in number than the wavelengths used in the network. **In the table, each bit is assigned to a wavelength to indicate whether the wavelength is in use. If a wavelength λ_1 is in use, the bit assigned to the wavelength λ_1 is set to "1". Otherwise, the bit is set to "0".** If, for example, it is determined in advance that the wavelength management table is arranged in a slot following a frame pulse, each node can recognize the wavelength management table from the position of the frame pulse. In the DQDB scheme, since a double bus arrangement is employed, the wavelength management table transmitted through one bus is returned by one slot generator to be inserted in a slot following a frame pulse of the other bus, and the wavelength management table is transmitted upon **setting a busy bit to "1" indicating that the slot is being used.**"*

Based on the above, Nakata discloses that the signal is circulated in the network, which suggests that the signal is received by all transceivers, since the transceivers are coupled together, therefore each transceiver/processor will receive the indication of "busy" signal. This is similar to the portion of the specification that appellant cited for

Art Unit: 2613

supporting the claims. Therefore, the combination of Nakata in view of Asahi or Nakata in view of Mo et al still read on the claimed subject matter.

On page 13, part F of the argument appellant states, *"For reasons set forth in Section E, this rejection should be reversed."*

The response to this argument is the same as indicated above for part E.

On page 13, part G of the argument appellant states, *"For reasons set forth in Section E, this rejection should be reversed."*

The response to this argument is the same as indicated above for part E.

(11) Related Proceeding(s) Appendix

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Dalzid Singh/
Primary Examiner, Art Unit 2613

Conferees:

/Jason Chan/

Supervisory Patent Examiner, Art Unit 2613

Application/Control Number: 09/839,023

Page 28

Art Unit: 2613

/Kenneth N Vanderpuye/

Supervisory Patent Examiner, Art Unit 2613